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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,009	01/21/2002	Ross Saunders	2545-000013	5489

27572 7590 12/28/2004

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EXAMINER

BELLO, AGUSTIN

ART UNIT	PAPER NUMBER
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2633

DATE MAILED: 12/28/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/054,009

Applicant(s)

SAUNDERS ET AL.

Examiner

Agustin Bello

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-36 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-36 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>1/21/02</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1-6 and 8-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Richards (U.S. Patent No. 6,778,778).

Regarding claim 1, Richards teaches a network diagnostic system for an optical transport network having a plurality of network elements, comprising, a first network element (reference numeral 12, 20, 38 in Figure 1) residing in the optical transport network, the first network element having a network diagnostic operation integrated therein (reference numeral 12, 38 in Figure 1) and operable to perform the network diagnostic operation, wherein the network diagnostic operation directly monitors an optical signal traversing the optical transport network (e.g. “test signal” throughout), a wayside communication subsystem (reference numeral 24, 62 in Figure 1) interconnecting the network elements residing in the optical transport network; and a network diagnostic device (reference numeral 62 in Figure 1) in data communication with the first network element and operable to initiate the network diagnostic operation at the first network element.

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Regarding claim 2, Richards teaches that the network element is further operable to communicate the network performance data determined by the network diagnostic operation to the network diagnostic device (column 5 lines 40-41).

Regarding claim 3, Richards teaches that the network diagnostic device is operable to display the network performance data received from the first network element (via computer 62 in Figure 1).

Regarding claim 4, Richards teaches that the network diagnostic device is directly connected to the first network element (column 4 lines 32-42).

Regarding claim 5, Richards teaches that the network diagnostic device is connected via a computer network (reference numeral 24 in Figure 1) to the first network element.

Regarding claim 6, Richards teaches that the first network element is further operable to communicate in real-time the network performance data determined by the network diagnostic operation to the network diagnostic device using TLI network management protocol (inherent in the ongoing machine to machine communication).

Regarding claim 8, Richards teaches that the network diagnostic device is connected via a computer network (reference numeral 24 in Figure 00) to a second network element (reference numeral 60 in Figure 1) and the second network element is in data communication with the first network element via the wayside communication system (reference numeral 72, 76 in Figure 1).

Regarding claim 9, Richards teaches that the second network element is adapted to receive Ethernet frames from the network diagnostic device, where the Ethernet frames embody a request to initiate the network diagnostic operation; the second network element being further operable to map the Ethernet frames into at least one optical network frame and transmit the

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optical network frames over an optical supervisory channel of the optical transport network (column 5 lines 32-41; e.g. “spare channel” in column 6 lines 13-26).

Regarding claim 10, Richards teaches that the first network element is adapted to receive the optical network frames over the optical supervisory channel (e.g. “spare channel” in column 6 lines 13-26) from the second network element and to extract the Ethernet frames from the optical network frames (inherent in the use of the Ethernet protocol in the system).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 7 and 11-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards.

Regarding claim 7, Richards differs from the claimed invention in that Richards fails to specifically teach that the first network element is further operable to store the network performance data in a storage medium residing on the first network element and the network diagnostic device operable to retrieve the network performance data from the first network element using a file transfer protocol. However, it is clear that the network element in Richards is of the typical sort and is clearly capable of storing the performance data until the diagnostic device retrieves it. Furthermore, storage of performance data at network elements is well known in the art. One skilled in the art would have been motivated to include storage at the network element in order to allow the diagnostic device to develop an better understanding of the long

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term operational characteristics of the network element and to retrieve that information at will. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to include a storage medium at the first network element and allow the diagnostic device operable to retrieve the network performance data from the first network element using a file transfer protocol.

Regarding claims 11-36, Richardson differs from the claimed invention in that Richardson fails to specifically teach the various diagnostic operations claimed. However, the diagnostic methodologies claimed are well known in the art and easily applicable to the system of Richardson. Furthermore, one skilled in the art would have been motivated to employ the various methods claimed in order to develop an overall measure of system performance based on a variety of measures. Therefore, it would have been obvious to one skilled in the art at the time the invention was made to employ the diagnostic methodologies claimed in the system of Richardson.

Conclusion

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Roberts, Amoruso, and Barry disclose relevant art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Agustin Bello whose telephone number is (571) 272-3026. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Agustin Bello
Examiner
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AB

A handwritten signature in black ink, appearing to read 'A. Bello', with a stylized, cursive script.

**AGUSTIN BELLO
PATENT EXAMINER**